



SEQUENCE LISTING

<110> Tucker, Kenneth

Plosila, Laura

<120> MORAXELLA CATARRHALIS OUTER MEMBRANE PROTEIN-106
POLYPEPTIDE, GENE SEQUENCE AND USES THEREOF

<130> 7969-089-999

<140> US 09/813,214

<141> 2001-03-20

<150> US 08/968,685

<151> 1997-11-12

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<170> PatentIn version 3.0

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 Asn Thr Glu Lys Ser Gly Ser Ala Ala Thr Ile Lys Asp Leu Tyr Asn
 675 680 685
 Leu Ser Gln Val Pro Leu Thr Phe Ala Gly Asp Thr Gly Pro Asn Val
 690 695 700
 Thr Lys Lys Leu Gly Glu Ile Leu Lys Val Lys Gly Gly Lys Thr Thr
 705 710 715 720
 Ala Asp Asp Leu Thr Lys Asn Asn Ile Gly Val Val Ala Asp Ser Thr
 725 730 735
 Asp Asn Ser Leu Thr Val Lys Leu Ala Lys Thr Leu Ser Asp Leu Asp
 740 745 750
 Ala Val Asn Thr Lys Thr Leu Thr Ala Ser Asp Lys Val Thr Val Asp
 755 760 765
 Ser Gly Asn Asn Thr Ala Lys Leu Gln Asn Gly Asp Leu Thr Phe Ser
 770 775 780
 Lys Gln Asn Thr Gly Ala Thr Pro Ala Thr Asn Ser Lys Thr Ile Gly
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 Val Asp Gly Leu Lys Phe Thr Asp Asn Asn Gly Ile Ala Leu Asp Gly
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 Ser Leu Asp Lys Ser Lys Pro Tyr Leu Asp Lys Asp Lys Leu Lys Val
 835 840 845
 Gly Glu Val Glu Ile Thr Thr Asn Gly Ile Asn Ala Gly Gly Lys Ala
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Ile Thr Gly Leu Ser Asn Thr Leu Thr Asp Ala Thr Asn Ala Thr Thr
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 Gly His Val Thr Gln Leu Gly Ile Val Asp Ser Thr Asp Lys Thr Arg
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 Ala Ala Ser Ile Gly Asp Val Leu Asn Ala Gly Phe Asn Leu Lys Asn
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 Ile Asn Gly Asn Ala Thr Thr Ala Lys Val Thr Tyr Asp Gly Lys Ala
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 Ser Lys Val Ala Tyr Asp Val Asn Val Asp Gly Thr Thr Ile His Leu
 945 950 955 960
 Thr Gly Ala Asp Gly Asn Lys Asn Gln Ile Gly Val Lys Thr Thr Thr
 965 970 975
 Leu Thr Lys Thr Asp Ala Lys Gly Asp Lys Ala Ile Asn Phe Ser Val
 980 985 990
 Asn Ser Gly Asp Asp Lys Ala Leu Ile Asn Ala Lys Asp Ile Ala Asp
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 Gln Ile Gln Val Gly Ala Asp Gly Val Lys Phe Ala Lys Val Asn
 1115 1120 1125
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 Arg Asp Glu Ile Gly Phe Ala Gly Thr Asn Gly Ser Leu Asp Lys
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Asp	Ala	Val	Thr	Gly	Gly	Lys	Ile	Tyr	Asp	Leu	Lys	Thr	Glu	Leu
1190						1195					1200			
Glu	Asn	Lys	Ile	Ser	Ser	Thr	Ala	Lys	Thr	Ala	Gln	Asn	Ser	Leu
1205						1210					1215			
His	Glu	Phe	Ser	Val	Ala	Asp	Glu	Gln	Gly	Asn	Asn	Phe	Thr	Val
1220						1225					1230			
Ser	Asn	Pro	Tyr	Ser	Ser	Tyr	Asp	Thr	Ser	Lys	Thr	Ser	Asp	Val
1235						1240					1245			
Ile	Thr	Phe	Ala	Gly	Glu	Asn	Gly	Ile	Thr	Thr	Lys	Val	Asn	Lys
1250						1255					1260			
Gly	Val	Val	Arg	Val	Gly	Ile	Asp	Gln	Thr	Lys	Gly	Leu	Thr	Thr
1265						1270					1275			
Pro	Lys	Leu	Thr	Val	Gly	Asn	Asn	Asn	Gly	Lys	Gly	Ile	Val	Ile
1280						1285					1290			
Asp	Ser	Gln	Asn	Gly	Gln	Asn	Thr	Ile	Thr	Gly	Leu	Ser	Asn	Thr
1295						1300					1305			
Leu	Ala	Asn	Val	Thr	Asn	Asp	Lys	Gly	Ser	Val	Arg	Thr	Thr	Glu
1310						1315					1320			
Gln	Gly	Lys	Ile	Ile	Lys	Asp	Glu	Asp	Lys	Thr	Arg	Ala	Ala	Ser
1325						1330					1335			
Ile	Val	Asp	Val	Leu	Ser	Ala	Gly	Phe	Asn	Leu	Gln	Gly	Asn	Gly
1340						1345					1350			
Glu	Ala	Val	Asp	Phe	Val	Ser	Thr	Tyr	Asp	Thr	Val	Asn	Phe	Ala
1355						1360					1365			
Asp	Gly	Asn	Ala	Thr	Thr	Ala	Lys	Val	Thr	Tyr	Asp	Asp	Thr	Ser
1370						1375					1380			
Lys	Thr	Ser	Lys	Val	Val	Tyr	Asp	Val	Asn	Val	Asp	Asp	Thr	Thr
1385						1390					1395			
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1400						1405					1410			
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1415						1420					1425			
Ala	Thr	Gly	Asp	Ala	Leu	Val	Lys	Ala	Ser	Asp	Ile	Val	Ala	His
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Leu	Asn	Thr	Leu	Ser	Gly	Asp	Ile	Gln	Thr	Ala	Lys	Gly	Ala	Ser
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1580						1585					1590			
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Asp	Gly	Asn	Gln	Glu	Pro	Val	Val	Gln	Gly	Arg	Asn	Gly	Ile	Asp
1820						1825					1830			
Ser	Ser	Ala	Ser	Gly	Lys	His	Ser	Val	Ala	Ile	Gly	Phe	Gln	Ala
1835						1840					1845			
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Asn	Ser	Tyr	Ser	Val	Gly	Asn	Asn	Asn	Gln	Phe	Thr	Asp	Ala	Thr
1910						1915					1920			
Gln	Thr	Asp	Val	Phe	Gly	Val	Gly	Asn	Asn	Ile	Thr	Val	Thr	Glu
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Ser	Asn	Ser	Val	Ala	Leu	Gly	Ser	Asn	Ser	Ala	Ile	Ser	Ala	Gly
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1970						1975					1980			
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1985						1990					1995			
Glu	Arg	Arg	Ile	Gln	Asn	Val	Ala	Ala	Gly	Glu	Val	Ser	Ala	Thr
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Ser Thr Asp Ala Val Asn Gly Ser Gln Leu Tyr Lys Ala Thr Gln
 2015 2020 2025

Gly Ile Ala Asn Ala Thr Asn Glu Leu Asp His Arg Ile His Gln
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Asn Glu Asn Lys Ala Asn Ala Gly Ile Ser Ser Ala Met Ala Met
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Ala Ser Met Pro Gln Ala Tyr Ile Pro Gly Arg Ser Met Val Thr
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Gly Gly Ile Ala Thr His Asn Gly Gln Gly Ala Val Ala Val Gly
 2075 2080 2085

Leu Ser Lys Leu Ser Asp Asn Gly Gln Trp Val Phe Lys Ile Asn
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